(21) Int. Application Number: PCT/DK90/00005

(22) Int. Filing Date: 8 January 1990 (08.01.90)

(30) Priority data:

65/89	6 January 1989 (06.01.89)	DK
659/89	10 February 1989 (10.02.89)	DK
4791/89	28 September 1989 (28.09.89)	DK

(71)(72) Applicants and Inventors: SCHENK, Hans, Gernot [DK/DK]; Hovborgvej 11, Lindknud, DK-6650 Brørup (DK). PEDERSEN, Søren [DK/DK]; Vangen 17, DK-6000 Kolding (DK).

(74) Agent: PLOUGMANN & VINGTOFT; Sankt Annæ Plads 11, DK-1250 Copenhagen K (DK).

(81) Designated States: AT (European patent), AU, BE (European patent), CA, CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB (European patent), IT (European patent), JP, LU (European patent), NL (European patent), SE (European patent), US.

Published
With international search report.

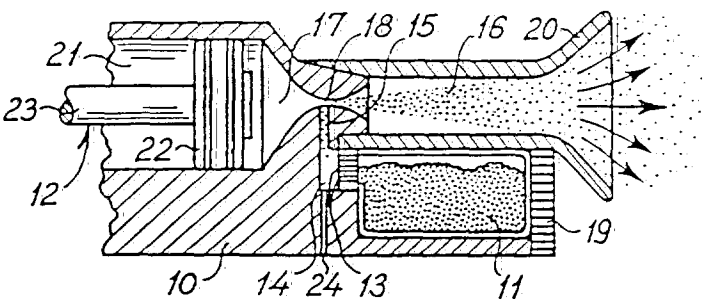
(51) International Patent Classification 5 : A61M 13/00, 15/00

A1

(11) Int. Publication Number: WO 90/07351

(43) Int. Publication Date: 12 July 1990 (12.07.90)

(54) Title: AN ORAL INHALER



(57) Abstract

An oral inhaler for use in inhaling a powdered or particulate medical product comprises a chamber (14) for containing the medical product, a mixing chamber (16), a gas flow passage (17) connected to the mixing chamber, and a pressure gas source or pumping device (40) for briefly providing in the gas flow passage a vigorous gas flow directed towards the mixing chamber. In order to obtain a high velocity of the gaz flow, the gas flow passage (17) has nozzle-like restriction (18). The product chamber (14) is communicating with the gas flow passage (17) at the restriction (18) or adjacent thereto so as to draw product from the product chamber into the gas flow by ejector effect, whereby the product is disintegrated in small respirable particles, which are thoroughly mixed with the gas flow. A product reservoir (11) may be provided for containing a product supply sufficient for several inhalation procedures. The medical product may, for example, be transferred from a product reservoir to product chambers or metering chambers (14), which are defined in a rotatable cylinder or drum (38). The pressure gas source may be a pumping device, such as a piston pump. However, the pumping device preferably comprises a pumping chamber having a springy, diaphragm-like wall part (40).

20262306 30

Source: https://www.industrydocuments.ucsf.edu/docs/yrxl0000